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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,541	01/02/2002	Lawrence A. Clevenger	YOR9-2001-0508-US1	9395

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EXAMINER
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LUK, LAWRENCE W

ART UNIT	PAPER NUMBER
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2187

DATE MAILED: 02/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/039,541	<b>Applicant(s)</b> CLEVENGER ET AL.	
	<b>Examiner</b> Lawrence W Luk	<b>Art Unit</b> 2187	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 7-10 is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 11-20 is/are rejected.
- 7) ☒ Claim(s) 3 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 19 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation “ wherein said battery is electrically connected to said integrated circuit chip through said battery” is indefinite, it is unclear how the battery is connected in relation to the integrated circuit chip. Appropriate correction is required.

The applicant's can overcome the above rejection of claim 19 under 35 U.S.C. 112, second paragraph by amending claim 19 in the following manner:

In claim 19, line 2, after “said” (second occurrence) replace “battery” with –  
package --

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 4 and 11-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith, Jr. et al. (4,645,943).

**Claim 1**

As to claim 1, Smith, Jr. et al. disclose in figure 1-4, a system level device for battery and integrate circuit chip integration comprising: at least one battery (46, 48); at least one integrated circuit chip (30) powered by said at least one battery (46, 48 see column 7, lines 40-48), and a package (52, 88, 66 see column 6, lines 15-18) having a pair opposed upright ends (see elements 88 and the portion of element 40 that includes elements 54), said package (52, 38, 40) connected (51, 53, 38, 56, 58, 60, 62) to any of said at least one battery (46, 48) and said at least one integrated circuit chip (30 see column 7, lines 1-48), wherein said at least one integrated circuit chip (30) lays on top of a portion of said package (52, 38, 40).

**Claim 2**

As to claim 2, Smith, Jr. et al. disclose in figure 1, said package (52, 38, 40) connects to said at least one integrated circuit chip (30) through an interior portion (62, 60, 58, 56, 38) of said package (52, 38, 40).

**Claim 4**

As to claim 4, Smith, Jr. et al. disclose in figure 2, wherein said at least one battery (46, 48) connects to an underside of said package (52).

**Claim 11**

As to claim 11, Smith, Jr. et al. disclose in figure 1-4, an integrated chip structure comprising: an integrated circuit chip (30); a battery (46, 48) directly connected (see column 7, lines 57-62) to said integrated circuit chip (30); and a package (52, 88, 66) having a pair of opposed upright ends (see elements 88 and the portion of element 40

that includes elements 54), said package connected (51, 53, 38, 56, 58, 60, 62) to any said battery (46, 48) and said integrated circuit chip (30), wherein said integrated circuit chip (30) lays on top of a portion of said package (52, 38, 40).

**Claim 12 and 13**

As to claims 12 and 13, Smith, Jr. et al. disclose in figure 1, column 4, lines 59-61, the leads 51 and 53 of the battery (46, 48) are soldered in through holes of the printed circuit board (38). Also as shown in figure 4, the integrated circuit (30) is a conventional 28-pin through connector (40), the shorter pins of connector (58, 60 and 62) are connected through the controller circuit (36) to the batteries (46, 48), consequently, the battery is soldered to the integrated circuit (30, see column 7, lines 45-48).

**Claim 14**

As to claim 14, Smith, Jr. et al. disclose in figure 1, wherein said package (52, 38, 40) surrounds said battery (46, 48) and said integrated circuit chip (30). (the integrated circuit chip 30 surrounds by package 66, the batteries 46, 48 surrounds by packages 66, 38, 88, 52).

**Claim 15**

As to claim 15, Smith, Jr. et al. disclose in figure 2 & 3, wherein said battery (46, 48) is directly connected to said package (52, 38, 40).

**Claim 16**

As to claim 16, Smith, Jr. et al. disclose in figure 1-4, an integrated chip structure comprising: a package (52, 38, 40) having a pair of opposed upright ends; an integrated

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circuit chip (30) mounted on said package (52, 38, 40); a battery (46, 48) directly connected to said package (52, 38, 40) and electrically connected to said integrated circuit chip (30), wherein said integrated circuit chip (30) lays on top of portion of said package (52, 38, 40).

**Claim 17**

As to claim 17, Smith, Jr. et al. disclose in figure 2, wherein said battery (46, 48) is held adjacent to said integrated circuit chip (30) by said package (52, 38, 40).

**Claim 18**

As to claim 18, Smith, Jr. et al. disclose in figure 1, wherein said package (52, 38, 40) is between said battery (46, 48) and said integrated circuit chip (30).

**Claim 19**

As to claim 19, Smith, Jr. et al. disclose in figure 1, wherein said battery (46, 48) is electrically connected to said integrated circuit chip (30) through said package (52, 38, 40).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith, Jr. et al. (4,645, 943) in combination with Nalbanti (4,633,239).

**Claim 20**

As to claim 20, Smith Jr. et al. discloses the elements as claimed except for “multiple battery stacked on said package”.

Nalbanti discloses in figure 1 an integrated chip structure represented as element 1. Nalbanti further teaches in figure 11C, 11D, 11G and 11H, multiple batteries stacked on a package for the purpose of providing spare power for the package. Nalbanti teaches in the paragraph bridging column 14 and 15 that instead of using large battery cells, slim-line button- types cells can be stacked a top one another.

It would have been obvious to one having ordinary skill in the art at the time of the invention to replace the single thick cell taught by Smith, Jr. et al. with multiple slim-line button cells stacked on one another as taught by Nalbanti, since Nalbanti teaches in the paragraph bridging column 14 and 15 teaches that multiple stacked slim-line button cells are equivalent to one regular signed battery cell.

***Allowable Subject Matter***

7. **Claims 5 and 7-10** are allowed.

**Claim 5**

The primary reason for allowance of the Claim 5 is the inclusion of **said at least one integrated circuit chip is disposed between said at least one battery and said package, and wherein said at least one integrated circuit chip lays on top of a portion of said package.**

**Claim 7 and 10**

The primary reason for allowance of the Claims 7 and 10, they are inclusion of **said at least one battery overhangs, and is larger than, said at least one integrated circuit chip.**

Claims 8 and 9 depend from claim 7 and therefore are allowable for at least the same reasons noted above with respect to claim 7.

8. **Claims 3 and 6** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent from including all of the limitations of the base claim and any intervening claims.

The primary reasons for allowance of claim 3 in the instant application is the combination with the inclusion in these claims that the **at least one battery overhangs said at least one integrated circuit chip.** The prior art of record neither anticipates nor renders obvious the above recited combination.

Claim 6 depend from claim 3 and therefore are allowable for at least the same reasons noted above with respect to claim 3.

**: IMPORTANT NOTE :**

If the applicant should choose to rewrite the independent claims to include the limitation recited in claims 3, the applicant is encouraged to amend the **title of the invention** such that it is descriptive of the invention as claimed as required by sec. 606.01 of the MPEP. Furthermore, the **Summary of the Invention** and the **Abstract**



should be amended to bring them into harmony with the allowed claims as required by paragraph 2 of § 302.01 of the MPEP.

As allowable subject matter has been indicated, applicant's response must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 C. F. R. § 1.111(b) and § 707.07 (a) of the M.P.E.P.

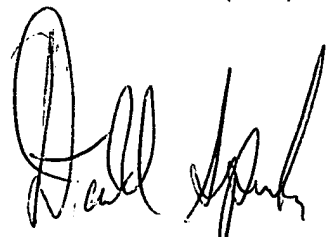
### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence W Luk whose telephone number is (571)272-2080. The examiner can normally be reached on 7 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald A Sparks can be reached on (571)272-4201. The fax phone number for the organization where this application or proceeding are (703)746-7239, (571)272-2100 for regular communication and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to receptionist whose telephone number is (571)272-2100.

LWL  
January 27 2005



**DONALD SPARKS**  
**SUPERVISORY PATENT EXAMINER**